

ABOVE-GROUND HYDRANT TYPE 2018L A (UNBREAKABLE) INSTRUCTIONS FOR SAFE HANDLING

Title: **ABOVE-GROUND HYDRANT TYPE 2018L A (30.03.2023 - rev. 04)**

Highest working – operating pressure
o PN 16 = 16 bar

1. INSTALLATION OF THE PRODUCT

• SELECTION OF HYDRANT

Correct installation of the hydrant is a condition for its uninterrupted operation.

It is particularly the location of the hydrant and the depth of the pipeline which are important in terms of an optimal selection of the hydrant. The location of the pipeline provides data on possible mechanic damage of the hydrant (break), the depth of the pipeline provides data on the mounting depth of the hydrant.

When installing the hydrant, particular attention should be paid to the safety of the worker, therefore we shall prepare a suitably sized excavation with a levelled area, where the worker r can stand. We shall ensure that the valve in front of the hydrant is closed or the pipeline is released from pressure. We fasten a sealing element to a clean connecting flange, set the hydrant and screw together. The position of the hydrant head can be adapted into any direction, regarding to the surroundings. Rotation of the hydrant is enabled by the top rotating flange, located on the head of the hydrant. The procedure is executed by unscrewing all 6 screws pos. 11 mark »A« (two to three rotations) and rotating the hydrant head in the desired direction. After the setting, we equally tighten the screws with T=35–40 Nm.

• DRAINAGE

It is also very important to settle the drainage outlet, particularly on heavy clayey areas. Otherwise, the water from the hydrant will not drain, which may cause the medium to freeze at low temperatures and consequently cause damages on the hydrant. When backfilling the hydrant, particular attention should be paid not to damage it. After the works are completed, we remove the PVC foil.

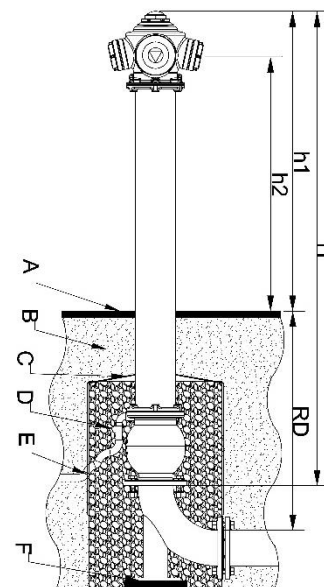
• WARNING

The hydrant is not designed for flushing or cleaning of the pipeline. Various foreign objects, such as sand in water, may damage the hydrant's sealing element. In case you nevertheless are using the hydrant for this purpose, we advise the following: the hydrant must be fully open. After the flushing close the hydrant with normal force. If the water continues to run, this indicates that a foreign object is caught in the hydrant piston – do not increase the closing force due to this. Repeat the opening and closing procedure. If the hydrant continues to leak, this indicates that a foreign object is trapped in the hydrant piston – the hydrant should be opened and the foreign object has to be removed. See point 2. If the hydrant piston is damaged, it needs to be replaced. It is not necessary to dig out the hydrant!

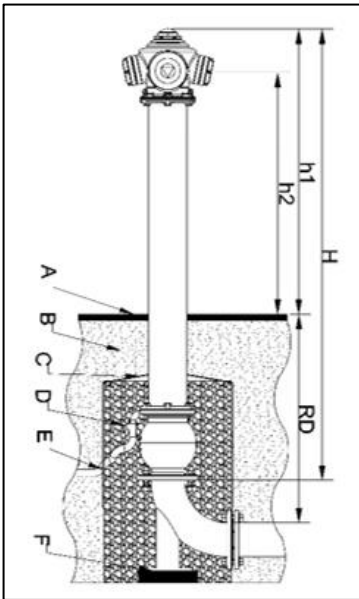
INSTALLATION OF THE HYDRANT INTO THE PIPELINE

| DIMENSIONS OF THE ABOVE-GROUND HYDRANT | | | | |
|--|---------------------------|------|-----|-----|
| DN | RD (MOUNTING DEPTH) | H | h1 | h2 |
| 80 | 750 | 1550 | 995 | 828 |
| | 1000 | 1800 | | |
| | 1250 | 2050 | | |
| | 1500 | 2300 | | |
| 100 | 750 | 1550 | 995 | 828 |
| | 1000 | 1800 | | |
| | 1250 | 2050 | | |
| | 1500 | 2300 | | |

- A Ground level
- B Ensure good consolidation of the ground
- C Felt or PE foil is recommended
- D Sand of thickness 4–20 mm
- E Option: drainage with PE pipe
- F Base-plate (recommended from concrete)




• **ALLOWED POSITIONS OF THE INSTALLED PRODUCT**



This is the only possible correct installation position for the product to function optimally.

2. MAINTENANCE AND REPAIRS

The above-ground hydrant is of a simple design and does not require special maintenance. In case of leakage or damage of the main sealing element, it is necessary to replace it.

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|  | <p>Before any maintenance work on or in the hydrant, close the valve in front of the hydrant! Assure pressure release of the hydrant, for example, unscrew the blind coupling and open the hydrant. All service works on the hydrant can only be performed by a qualified and trained person.</p> |
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2.1 PROCEDURE OF REPLACEMENT OF THE MAIN SEALING ELEMENT FOR ABOVE-GROUND HYDRANT TYPE 2018L A (UNBREAKABLE)

(SEE APPENDIX – LIST OF COMPONENTS OF THE HYDRANT TYPE 2018L A)

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| <ol style="list-style-type: none"> 1. Close the inflow of the water into the hydrant. 2. Open the hydrant to open position and check that it is not under pressure – pressure release of the hydrant. 3. Unscrew the screws – pos. 11 on the top flange – pos. 14 (under the hydrant head). 4. Pull out the whole hydrant head – pos. 2 with spindle – pos. 5 and piston – pos. 4. 5. Remove the piston – pos. 4 by removing the screws – pos. 9. 6. Replace the piston – pos. 4 with a new one and fix it with screws – pos. 9. The glue against unscrewing should be used for this process (put the glue on the screws – pos. 9 before screwing them). 7. Grease the external diameter of the rubberized piston. | <ol style="list-style-type: none"> 8. Remove the water from the hydrant valve with use of vacuum pump or scoop. This enables the assembly. 9. Check the »O« gasket – pos. 13 on the bottom part of the head and replace it in case of damage. 10. Insert the whole hydrant head – pos. 2 with spindle – pos. 5 and piston – pos. 4 into the pipe – pos. 3. When the spindle with piston stops, it should be pushed to the end in its position, until the hydrant head – pos. 2 sets onto the flange of pipe – pos. 3. Pay attention that the »O« gasket – pos. 13 is in its position. 11. Check if the hydrant is in closed position. 12. Open the inflow of water to the hydrant and check the functionality of the hydrant by opening and closing. |
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2.2 PROCEDURE OF FLUSHING THE FOREIGN PARTS FOR ABOVE-GROUND HYDRANT TYPE 2018L A (UNBREAKABLE)

(SEE APPENDIX – LIST OF COMPONENTS OF THE HYDRANT TYPE 2018L A)

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| <ol style="list-style-type: none">1. Close the inflow of the water into the hydrant.2. Open the hydrant to open position and check that it is not under pressure – pressure release of the hydrant.3. Unscrew the screws – pos. 11 on the top flange – pos. 14 (under the hydrant head).4. Pull out the whole hydrant head – pos. 2 with spindle – pos. 5 and piston – pos. 4.5. Remove the piston – pos. 4 by removing the screws – pos. 9.6. Check the »O« gasket – pos. 13 on the bottom part of the head and replace it in case of damage.7. Insert the whole hydrant head – pos. 2 with spindle – pos. 5 into the pipe – pos. 3, until the hydrant head – pos. 2 sets onto the flange of pipe – pos. 3. Pay attention that the »O« gasket – pos. 13 is in its position.8. Fix the fire hose on one of the couplings. The hose should be installed in such way that it will not swing freely around and damage the present persons.9. Open the valve in front of the hydrant and flush the hydrant as long as no more foreign parts are visible.10. Close the valve in front of the hydrant and remove the fire hose. | <ol style="list-style-type: none">11. Unscrew the screws – pos. 11 on the top flange – pos. 14 (under the hydrant head).12. Remove the whole hydrant head – pos. 2 with spindle – pos. 5.13. Place the piston – pos. 4 and fix it with screws – pos. 9. The glue against unscrewing should be used for this process (put the glue on the screws – pos. 9 before screwing them).14. Grease the external diameter of the rubberized piston.15. Remove the water from the hydrant valve with use of vacuum pump or scoop. This enables the assembly.16. Check the »O« gasket – pos. 13 on the bottom part of the head and replace it in case of damage.17. Insert the whole hydrant head – pos. 2 with spindle – pos. 5 and piston – pos. 4 into the pipe – pos. 3. When the spindle with piston stops, it should be pushed to the end in its position, until the hydrant head – pos. 2 sets onto the flange of pipe – pos. 3. Pay attention that the »O« gasket – pos. 13 is in its position.18. Check if the hydrant is in closed position.19. Open the inflow of water to the hydrant and check the functionality of the hydrant by opening and closing. |
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In case of any complications during the service please contact the service of IMP Armature d.o.o. or replace the whole hydrant.

2.3 APPENDIX – LIST OF COMPONENTS OF THE HYDRANT TYPE 2018L A (UNBREAKABLE)

| Pos. | Pcs | Title |
|------|-----|--------------------------------------|
| 1 | 1 | VALVE |
| 2 | 1 | HEAD |
| 3 | 1 | PIPE |
| 4 | 1 | PISTON |
| 5 | 1 | SPINDLE |
| 6 | 1 | SPINDLE NUT |
| 7 | 1 | LIMITER |
| 8 | 1 | LIMITER |
| 9 | 2 | SCREW M10X25 |
| 10 | 1 | FLANGE "B" |
| 11 | 12 | SCREW M10X20 |
| 12 | 12 | WASHER BN1217 M10 |
| 13 | 2 | GASKET |
| 14 | 1 | FLANGE "R" |
| 15 | 1 | CAP "B" |
| 16 | 1 | COUPLING "B" |
| 17 | 1 | "O" RING $\Phi 80 \times \Phi 3,5$ |
| 18 | 1 | AI NUT "B" |
| 19 | 1 | OPERATING CAP |
| 20 | 1 | SCREW M8X16 |
| 21 | 1 | AI CAP |
| 22 | 1 | LIMITER |
| 23 | 1 | "O" RING $\Phi 26 \times \Phi 3$ |
| 24 | 1 | AIR VALVE |
| 25 | 1 | "O" RING $\Phi 9 \times \Phi 2,5$ |
| 26 | 1 | POM BEARING |
| 27 | 2 | "O" RING $\Phi 18 \times \Phi 2,5$ |
| 28 | 1 | PLUG |
| 29 | 2 | SCREW M10X35 |
| 30 | 1 | SEALING RING |
| 31 | 1 | "O" RING $\Phi 87 \times \Phi 4$ |
| 32 | 2 | CAP "C" |
| 33 | 2 | COUPLING "C" |
| 34 | 2 | "O" RING $\Phi 61,9 \times \Phi 3,5$ |
| 35 | 2 | AI NUT "C" |

